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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of	)	
	)	
Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees	)	WT Docket No. 96-148
	)	
Implementation of Section 127 of the Communications Act -- Elimination of Market Entry Barriers	)	~~GN Docket No. 96-113~~

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COMMENTS OF MOTOROLA, INC.

Motorola, Inc. ("Motorola") hereby submits its comments on the above-captioned Notice of Proposed Rulemaking ("*Notice*").[1] By this *Notice*, the Commission proposes to permit licensees in the broadband personal communications service ("PCS") to partition their markets on a geographic basis and to disaggregate their licensed spectrum blocks. Motorola supports the objectives of the *Notice* proposals to provide further flexibility to licensees and allow competitive forces, rather than regulation, to dictate entry into wireless markets. However, Motorola's comments herein propose that the minimum amount of paired spectrum which must be disaggregated should be smaller than the *Notice* suggests and discuss whether

[1]Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees, WT Docket No. 96-148, FCC 96-287 (July 15, 1996). The *Notice* was published in the Federal Register on July 25, 1996, and, accordingly, comments in this proceeding are due on August 15, 1996. Pursuant to ¶70 of the *Notice*, these comments have also been submitted to Dorothy Conway at the FCC and Timothy Fain at OMB.

or not small disaggregation amounts require changing the service definition for "broadband PCS."[2]

Motorola proposes that the disaggregated licensees must be authorized to operate on at least 100 kHz of paired spectrum (*i.e.*, 100 kHz + 100 kHz), rather than the 1 MHz proposed by the Commission for technical and economic reasons. Motorola believes its proposal will more readily accomplish the Commission's objectives of supporting in its rules and policies the "rapid development and implementation of the fullest range of PCS services and ensuring that PCS is more fully competitive with other mobile radio services."[3] Motorola's proposed modification would also better allow licensees and new entrants to tailor disaggregated spectrum blocks so that all viable technologies can be utilized to serve specific market needs.

As a manufacturer, Motorola urges the Commission to adopt spectrum disaggregation rules that are both technology- and application-neutral. Recognizing that no single technology is appropriate for all applications, Motorola manufactures a wide variety of analog and digital wireless mobile radio systems using frequency division, time division, and spread spectrum modulation techniques. The inherent radio characteristics of these technology platforms require carrier bandwidths of varying amounts, and different basic amounts of system spectrum, depending upon desired use, throughput and other factors. To allow optimum usage of the spectrum and the broadest choice of technology by licensees of broadband PCS spectrum, Motorola believes that spectrum disaggregation rules should be sufficiently flexible

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[2]*Notice* at ¶43.

[3]*Notice* at ¶39 (citing New Personal Communications Services, 9 FCC Rcd 4957, 4981 (1994)).

to permit deployment of *any* technology for *any* intended use.[4] This, in turn, will result in the broadest and most innovative mix of offerings to the public and, ultimately, the most competitive wireless marketplace.

The 1 MHz floor proposed by the Commission will advantage inadvertently, we believe, certain technologies over others. The minimum of 100 kHz by 100 kHz proposed by Motorola provides limits on unrestricted disaggregation yet, at the same time, is an increment of spectrum that can be used, in differing multiples, to provide channels for nearly any transmission technology available. Those who need greater amounts of spectrum may acquire in 100 kHz multiples that amount necessary for whatever technology they may want to utilize. Accordingly, Motorola submits that disaggregation of spectrum in minimum increments of 100 kHz paired best achieves the goal of optimal spectrum usage.

As a practical matter, the smaller increment of 100 kHz paired channels would also have the benefit of allowing small business entities to participate as licensed entrepreneurs in PCS. As the Commission notes, "eliminat[ing] entry barriers into the telecommunications market for small businesses" is one of Congress' mandates in Section 257 of the Communications Act of 1934, as amended by the Telecommunications Act of 1996.[5] By allowing the disaggregation of smaller amounts of spectrum, the Commission would be providing opportunities for more small business entrepreneurs to identify, and capitalize on,

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[4]Motorola observes that the definition of broadband PCS encompasses any mobile service and ancilliary fixed services provided to businesses or customers, and therefore should not need modification in light of the proposed disaggregation policies. 47 C.F.R. §24.5.

[5]Pub. L. No. 104-104, § 101, 110 Stat. 56 (1996).

niche opportunities that do not pose the same daunting spectrum acquisition costs of full broadband PCS licenses. Despite the incentives applicable to the C- and F-Blocks in PCS, some small companies still do not have the resources to participate in an auction for spectrum. Allowing smaller increments in disaggregation may offer some of these companies a potential route to market that is more tailored to their needs and budgets.

In conclusion, Motorola supports the *Notice* proposals to provide more flexibility to broadband PCS licensees, as this flexibility will spur greater innovation and competition in the development of new offerings for the public. Motorola believes the minimum spectrum increment of 100 kHz paired is optimal for realizing the FCC's goals of more competitive services, better utilization of spectrum, and greater opportunities for small businesses. Because the proposed 1 MHz limitation on spectrum disaggregation may act as an unnecessary and unintentional inhibitor favoring certain technologies or applications and may still deter some potential users from participating because of costs, Motorola urges the Commission to adopt the increment of 100 kHz paired to govern disaggregation.

Respectfully submitted,

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